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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/043,406	03/18/1998	PAUL D O'BRIEN	36-1148	6681

23117   7590   01/26/2007
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EXAMINER
ROBINSON BOYCE, AKIBA K

ART UNIT	PAPER NUMBER
3628	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	09/043,406	O'BRIEN ET AL.
	Examiner	Art Unit	
	Akiba K. Robinson-Boyce	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 November 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>53-57 and 61-67</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>53-57, and 61-67</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Status of Claims

1.   Due to communications filed 11/20/06, the following is a final office action.

Claims 1-52, 58-60, and 68-76 are cancelled. Claims 53-57, and 61-67 are amended.

Claims 53-57, and 61-67 are pending in this application. The previous rejection has

been maintained, but re-arranged in response to the amendment filed. Claims 53-58

and 61-76 are rejected as follows.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
>
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
>
> the prior art are such that the subject matter as a whole would have been obvious at the time the
>
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
>
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 53-57 and 61-66 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Carr et al (US 5,608,446).

As per claims 53, Carr et al discloses:

an input for receiving a service request for a composite service, (Col. 5, lines 19-

25, keyboard/monitor, and input/output interface, w/ col. 20, lines 14-21, shows user

input for a request to switch to a high speed link);

Processing means for processing the composite service request, (Col. Col. 9, lines 61-64, service provider uses system to initiate a request);

negotiation means for use in establishing conditions applicable to provision, by one or more other agents in said multi-agent system, of one or more component processes involved in provision of the composite service, said negotiation means being adapted to assemble said conditions proactively by negotiation prior to receipt of said composite service request, (Col. 9, line 67-Col. 10, line 15, providing negotiations in order to allocated bandwidth without causing overload conditions, where the agents are represented by the plurality of service providers);

an up-datable data store/means to access said up-datable data store for storing said conditions when established and assembled, (Col. 9, lines 45-49, shows a database that works in conjunction with the negotiation means);

an output for providing a response to the composite service request, said response comprising a n indication of availability of the requested composite service, (Col. 15, lines 19-25, input/output interface, w/ col. 10, lines 21-26, control processor mediates requests, w/ col. 25, line 5-Col. 26, line 4, output transferred or source to destination);

where the processing means is adapted to process a composite service request by accessing one or more of the previously established conditions, for supply of component processes by said one or more other agents, in the data store, processing the request using the one or more established conditions and producing said response, (Col. 9, lines 60-67, assigning a specified bandwidth to accommodate data to be transmitted from the service provider to the user).

As per claims 54/55, Carr et al discloses:

Wherein one or more of said established conditions has an associated expiry time after which it is no longer applicable/Wherein the processing means is adapted to detect an expired or undefined condition in the data store, which condition is applicable to a component process used in the provision of the requested composite service, and to trigger the negotiation means to establish a substitute condition, (Col. 9, lines 53-62, after expiration is represented by outside of the given period of time for a specified bandwidth).

As per claim 56, Carr et al discloses:

means to access said data store for storing data related to services offered by the agent and to one or more entities which have an interest in receiving information relating to one or more of said services, together with means to transmit information based on said data related to services to the one or more entities which have an interest, (Col. 9, lines 45-49, shows a database that works in conjunction with the negotiation means).

As per claim 57, Carr et al discloses:

which further comprises initiation means to initiate one or more component processes in provision of a requested composite service, (Col. Col. 9, lines 61-64, service provider uses system to initiate a request);

As per 61, Carr et al discloses:

Establishing conditions applicable to provision, by one or more other agents in said multi-agent system, of one or more component processes in a composite service, proactively by negotiation prior to receipt of a request for said composite service, (Col.

9, line 67-Col. 10, line 15, providing negotiations in order to allocated bandwidth without causing overload conditions, in this case, the negotiations establishes conditions without going into overload, where the agents are represented by the plurality of service providers);

Accessing an up-datable data store and storing said component process supply conditions once established, (Col. 9, lines 45-49, shows a database that works in conjunction with the negotiation means);

subsequently receiving a request for said composite service, (col. 20, lines 14-21, shows user input for a request to switch to a high speed link)

Processing said composite service request by:

a)accessing one or more of said previously established conditions, for component process supply in the data store, (Col. 9, lines 45-49, shows a database that works in conjunction with the negotiation means); and

b)providing a response to the composite service request, said response comprising an indication of availability of the requested composite service dependent upon whether said one or more established conditions for component process supply is met, (Col. 9, lines 60-67, assigning a specified bandwidth to accommodate data to be transmitted from the service provider to the user).

As per claim 62, Carr et al discloses :

wherein one or more of said established conditions for the component process supply stored in said data store is applicable until advent of an expiry time associated

with said one or more conditions, (Col. 9, lines 53-62, after expiration is represented by

outside of the given period of time for a specified bandwidth).

As per claim 63, Carr et al discloses :

further comprising the step, responsive to receipt of said composite service

request, of finding whether any conditions for provision of component processes in said

service are expired or undefined and substituting a substitute condition in the event that

any such condition is found, (Col. 9, lines 53-56, w. col. 10, lines 1-15, update of

channel availability (which includes bandwidth capacity) to prevent overload conditions,

where bandwidth allocation is assigned for a specified bandwidth for a given period of

time, where after expiry time is represented by outside of the given period of time for a

specified bandwidth).

As per claim 64, Carr et al discloses :

wherein said method further comprises the step of scheduling provision of said

one or more component processes, said step being carried out after receipt of said

request for said composite service, (Col. 23, lines 11-22, scheduling by scheduling

server).

As per claim 66, Carr et al discloses:

identifying component processes for use in provisioning the requested composite

service, (Col. 17, lines 15-24, shows daemon process and slave process identified by

connections to PC).

As per claim 67, Carr et al discloses:

Initiating one or more of said component processes identified for use in the requested composite service, (Col. 17, lines 15-24, forwarding addresses via a "connect" message).

4.   Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carr et al (US 5,608,446).

As per claim 65, Carr et al fails to specifically disclose the following, however, does disclose first and second requests in col. 8, line 29-Col. 9, line 4, and therefore, it would be obvious to repeat the scheduling according to a service request based on conditions established under negotiations as described in independent claim 61, and as disclosed below:

re-schedule the component process; transmit a message to an entity which requested the composite service, indicating that ii) the composite service can only be provided under conditions different to previously established conditions for supply of said composite service; iii) re-assign the composite service to another service provider; or indicate to an entity which requested the composite service that the requested composite service cannot be provided, (col. 27, lines 58-62, [identify alternatives and implement indicated actions]).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to re-schedule the component process; transmit a message to an entity which requested the service, indicating that ii) the service can only be provided under conditions different to said previously established conditions; iii) re-assign the service to another service provider; or indicate to an entity which requested the service

that the requested service cannot be provided, with the motivation of repeating a

process for which multiple service requests have been received.

Response to Arguments

5.   Applicant's arguments filed 11/20/06 have been fully considered but they are not

persuasive.

As per claims 53-58, 61-66 and 68-76, applicant makes arguments. However,

out of these claims, claims 58, and 68-76 have been cancelled, therefore, arguments for

these claims are moot. As per claims 53-57, and 61-66, applicant argues that Carr

discloses a request for an atomic (indivisible) service being dealt with by reference to

some resource availability data, and that in Carr, despite the use of the word

"negotiation", there is no suggestion in Carr that it is open to the split channel bridging

unit to do anything other than refuse or allow the request, and hence is no teaching of

negotiation as it is defined in the present specification. However, in Carr, negotiating

involves allocating bandwidth. As shown in Col. 10, lines 31-36, there is a plurality of 6

megahertz bandwidth RF channels to be made concurrently available. Therefore the

request can be allowed based on 6 different bandwidths, and in order to make an

allocation one out of the 6 bandwidths must be negotiated for each request.

In addition, the applicant argues that Carr does not teach **negotiation prior to**

receipt of said service request. However, in col. 9, line 60-Col. 10, line 9, Carr

teaches that upon (immediately or very soon after) making a determination that a

substantial quantity of data is to be transmitted to a given user, the service provider

could *then* initiate a request for bandwidth allocation, and then assign a specified

bandwidth for a given period of time. However, since the assignment of the bandwidth is *specified*, the negotiation process must take place before the request for bandwidth allocation. One cannot assign a specified bandwidth without an initial negotiation of the bandwidth, especially since there is a plurality of 6 megahertz bandwidth RF channels to be made concurrently available as discussed in the previous paragraph. Therefore, a negotiation for one of the 6 bandwidth channels must be made prior to initiating a request for a specified bandwidth.

Applicant also argues that the director daemon and slave processes are not two autonomous negotiating software processes since there is no communication between a daemon and a process it forks. However, this argument is based on claim 68, which is cancelled, and therefore the argument is moot.

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Akiba K Robinson-Boyce whose telephone number is

571-272-6734. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Hayes can be reached on 571-272-6708. The fax phone numbers for

the organization where this application or proceeding is assigned are 703-746-7238

[After final communications, labeled "Box AF"], 703-746-7239 [Official Communications],

and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

3900.

A. R. B.
January 21, 2007